

Significance Determination Process Training

Wayne Schmidt, SRA, Region I
Mike Parker, SRA, Region III

February 19, 2004

9/1-8

Probability Basics

- Success and Failure
 - For any given safety function/system the prob of success + the prob of failure = 1.0
 - Fault Tree (And & Or gate logic to estimate the prob of FAILURE)
- Frequency of Initiating Event(IE)
- $\text{Freq of IE} * \text{Core Damage Prob (CDP)} = \text{Core Damage Freq (CDF)}$
 - Event Tree (Tree branch logic to estimate the CDP and CDF) (Up branch = success & Down branch = failure)

Phase 2 Notebooks

- Specific to the given plant
- Table 1 - Initiating Event Frequency
- Table 2 – System Dependency
- Tables 3.X – Individual Initiating Event SDP worksheets
- Event Trees